## CLAIMS

1. A method for simultaneously measuring cholesterol in low density lipoprotein and total cholesterol in a biological sample, whereby cholesterol in low density lipoprotein and total cholesterol in a biological sample are quantified with a single measurement.

2. The method of claim 1, which comprises a first step in which cholesterol in lipoproteins other than the low density lipoprotein in a biological sample is reacted and a second step in which cholesterol in the remaining low density lipoprotein is reacted.

3. The method of claim 1, whereby a measurement value reflecting the existing amount of cholesterol in lipoproteins other than the low density lipoprotein in a biological sample and a measurement value reflecting the existing amount of cholesterol in the low density lipoprotein are obtained with a single measurement and then the existing amounts of cholesterol in the low density lipoprotein and total cholesterol in the biological sample are simultaneously measured based on the two above values.

4. The method of claim 3, which comprises the first step of obtaining a measurement value reflecting the existing amount of cholesterol in lipoproteins other than the low density lipoprotein in a biological sample and a second step of obtaining a measurement value reflecting the existing amount of cholesterol in the remaining low density lipoprotein.

5. The method of any one of claims 1 to 4, wherein, in the presence of a surfactant acting on lipoproteins other than the low density lipoprotein, the first step comprises causing cholesterol esterase and cholesterol oxidase to act on lipoproteins other than the low density lipoprotein in a biological sample, converting the generated hydrogen peroxide into a quinone dye, and then measuring the resultant, or comprises causing cholesterol esterase and cholesterol dehydrogenase to act on lipoproteins other than the low density lipoprotein in a biological sample and then measuring the generated NADH

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(reduced β-nicotinamide adenine dinucleotide).

6. The method of any one of claims 1 to 5, wherein the second step comprises, adding a surfanctant acting at least on the low density lipoprotein to the reaction product of the first step, causing cholesterol esterase and cholesterol oxidase to act on the remaining low density lipoprotein, converting the generated hydrogen peroxide to the quinone dye, and then measuring the resultant or comprises causing cholesterol esterase and cholesterol dehydrogenase to act on the remaining low density lipoprotein and then measuring the generated NADH (reduced β-nicotinamide adenine dinucleotide).

7. The method of any one of claims 1 to 6, in which analysis is carried out under different measurement conditions with a single measurement using an automated analyzer for clinical and chemical examination.

8. The method of any one of claims 1 to 7, in which cholesterol in low density lipoprotein in blood is quantified by finding the difference between absorbances obtained as measurement values in the first and second steps.

9. The method of any one of claims 1 to 8, in which total cholesterol is quantified by finding total absorbance based on a change in absorbance obtained as a measurement value in the first step and a change in absorbance obtained as a measurement value in the second step.

10. A reagent composition for simultaneously measuring cholesterol in low density lipoprotein and total cholesterol in a biological sample according to the method of any one of claims 1 to 6.

11. The reagent composition of claim 10, which comprises a surfactant acting on lipoproteins other than the low density lipoprotein, a surfactant acting on at least the low density lipoprotein, cholesterol esterase, and cholesterol oxidase.

12. The reagent composition of claim 10, which comprises the surfanctant acting on lipoproteins other than the low density lipoprotein, the surfactant acting on at least the low density lipoprotein, cholesterol esterase, and cholesterol

dehydrogenase.